Manufacture's Limited Warranty for Precision Spot Sprayer

The limited warranty set forth below is given by Precision Products, Incorporated with respect to new merchandise purchased and used in the United States, its possessions and territories.

Precision Products, Incorporated warranties the product (s) listed against defects in material and workmanship, and will at our option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been assembled, operated, and maintained in accordance with the owner's manual furnished with the product, and has not been subject to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of one year. Parts found to be defective within the warranty period will be replaced at our expense. Our obligation under this warranty is expressly limited to the replacement or repair, at our option, of parts found to be defective in material and workmanship.

Contacting Service

Warranty parts replacements are available, only with **Proof of Purchase**, through our Customer Service Department. Call **1 (800) 225-5891**

This limited warranty does not provide coverage in the following cases:

1. Routine maintenance items such as lubricants and filters.
2. Normal deterioration of the exterior finish due to use or exposure.
3. Transportation and/or labor charges.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the part as identified below. No other express warranty whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Precision Products, Inc. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale.

Precision Products, Inc. , will not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

During the warranty period, the exclusive remedy is replacement of the part. In no event shall recovery of any kind be greater that the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

Local Law to this Warranty

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

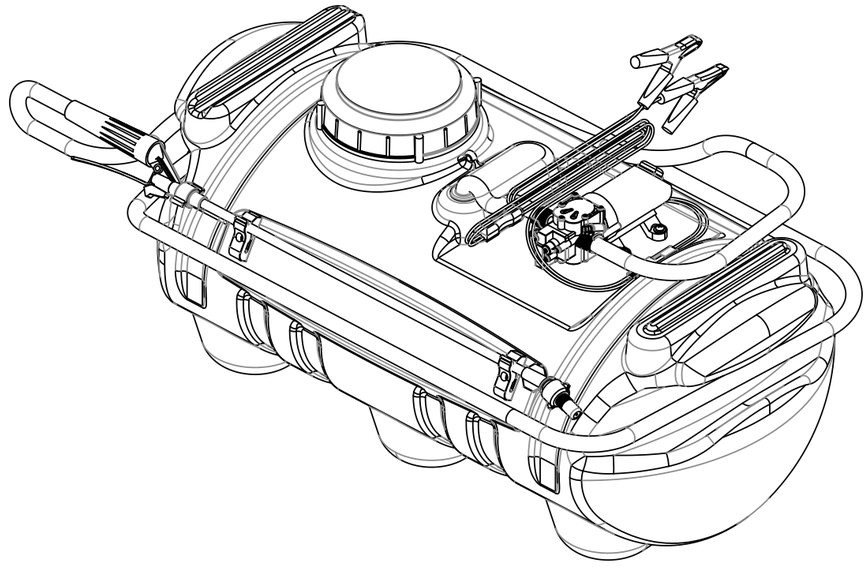
Warranty Period

The Warranty period stated below begins with the **Proof of Purchase**. Without the proof of purchase, the Warranty period begins from the date of manufacture.

Sprayer Warranty Period

The warranty period for this unit is as follows: All parts are covered one year from date of sale.

Precision Owner's Manual | TCS25| Spot Sprayer



Manual Contents

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Your New Sprayer

Congratulations on your purchase of a new Precision Products, Inc. Sprayer. Your Sprayer has been engineered and built to give you the most dependable and best performing product possible. Proper operation and maintenance will ensure long satisfactory service. Please study the manual carefully to become familiar with the operation and maintenance instructions.

Keep your manual in a safe, convenient place for future reference. Always mention the model and part number in any correspondence, when ordering parts.

If you experience any problem you can not easily resolve, please feel free to contact our knowledgeable and helpful customer service department toll-free at **1 (800) 225-5891.**

Caution: Carefully read all rules and instructions for safe operation.

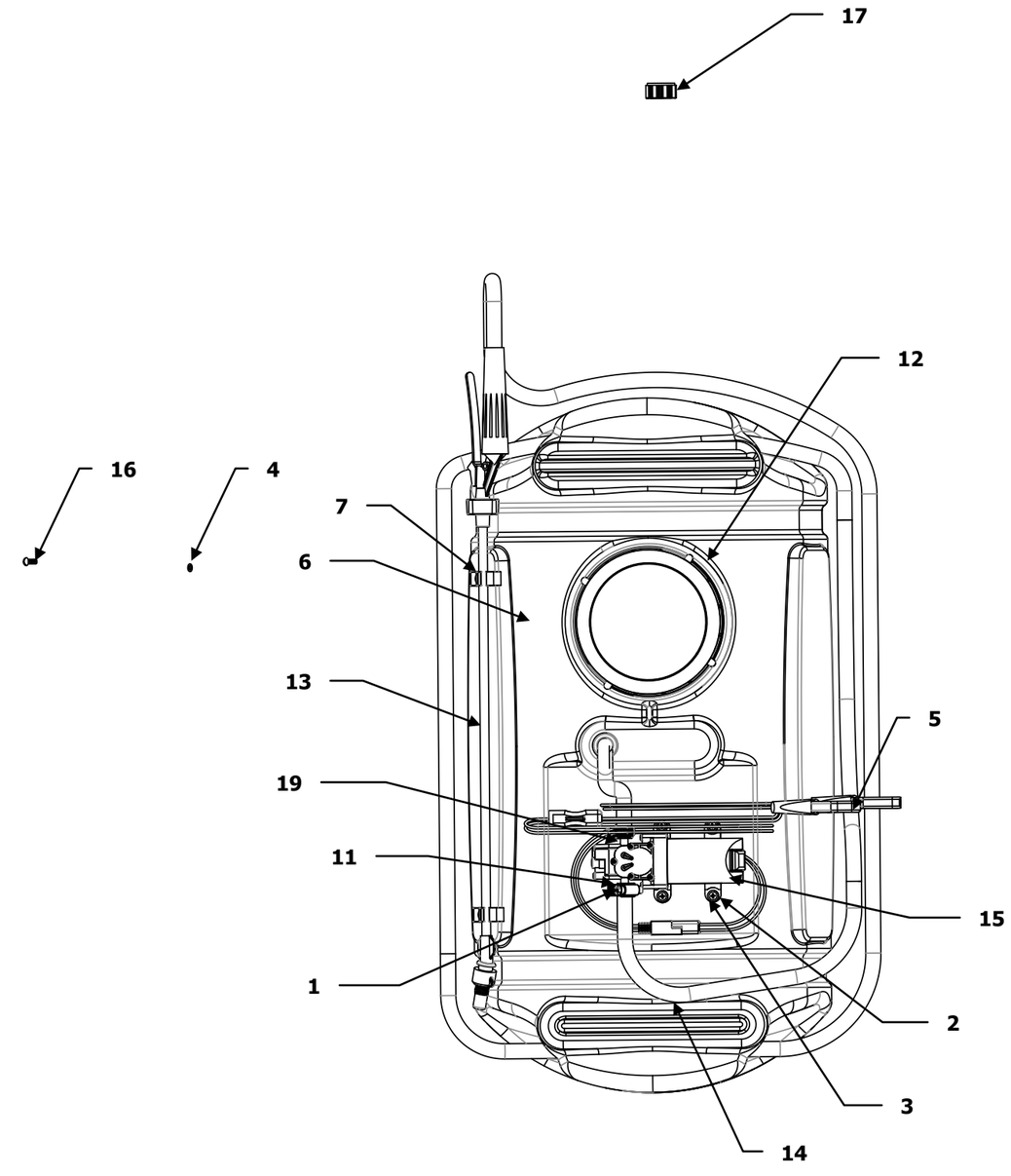
Form No. 3647-4 (Rev. 09/10)

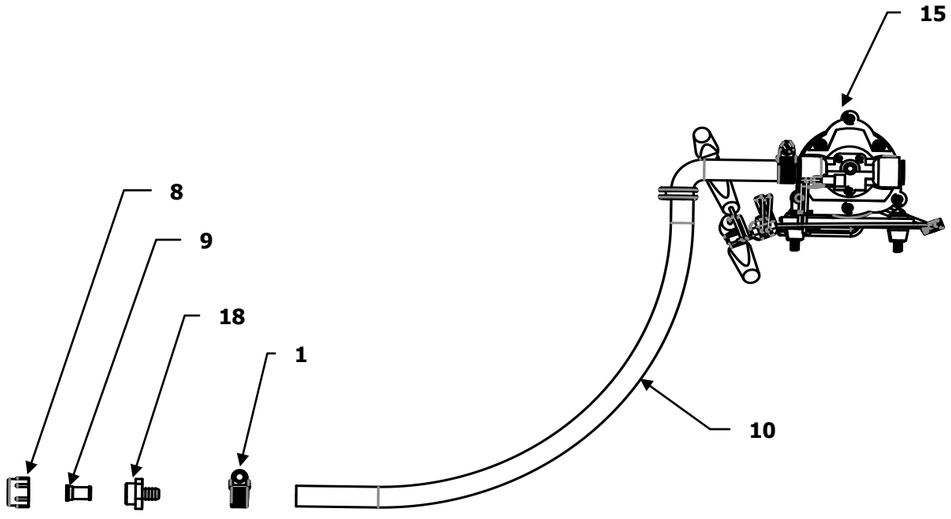
Rules for Safe Operation

The following safety precautions are suggested. This Sprayer is designed, engineered and tested to offer reasonably safe and effective service, provided that it is operated in strict accordance with these instructions. Failure to do so may result in personal injury. Always observe the rules of safe operation. Please read and retain this manual.

- Read and understand your tractor's owner's manual and towing safety rules, know how to operate your tractor before using any attachment.
- Be alert for holes in the terrain and other hazards. This could cause you to lose control of the cart and lawn tractor.
- Follow maintenance and lubrication instructions as outlined in this manual.
- Tractor braking and stability may be affected with the attachment of this unit. Be aware of changing conditions on slopes. Refer to safety rules in your tractor owner's manual concerning safe operation on slopes. **Stay Off Steep Slopes.**
- Always operate up and down a slope, never across the face of a slope**.**
- Do not drive close to creeks, ditches or public highways.
- Always wear substantial footwear. Do not wear loose fitting clothing that may get caught in moving parts.
- Avoid extremely sharp turns.
- Follow the maintenance instructions as outlined in this owner's manual.
- Do not exceed maximum towing speed of 4 M.P.H.
- **Warning of danger of improper use of the Sprayer.** This unit is intended for use only with Riding Mowers or Garden Tractors. It is definitely not for Highway use, being pulled at high speeds, or transporting passenger(s) of any sort. Such use could result in injuries for which we cannot be held responsible.

Not all parts shown

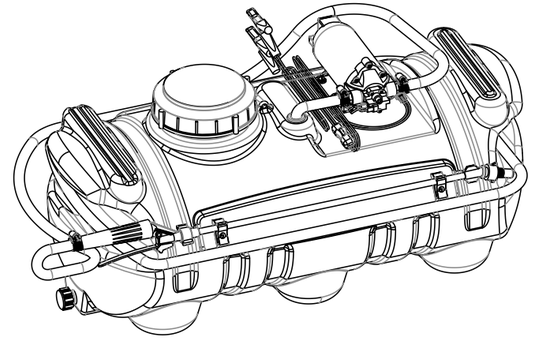




TCS25

Ref No.	Part No.	Qty.	Description
1	3632	4	Hose Clamp (Stainless Steel)
2	3604	4	10-24 x 1-1/4" Round Head Screw
3	3605	4	#10 Flat Washer
4	3636	6	#10 Lock Washer
5	3780	1	Wire Harness
6	3626	1	25 Gallon Sprayer Tank
7	3784	2	Wand Holder
8	3620	1	Nozzle Cap
9	3619	1	Suction Strainer
10	3774	1	1/2" Rubber Hose 24"

Ref No.	Part No.	Qty.	Description
11	3607	1	Hose Barb 3/8"
12	3601	1	Tank Lid
13	3658	1	Sprayer Wand & Nozzle
14	3773	1	3/8" Rubber Hose 15'
15	3609	1	Electric Pump Motor (1.8w/ Switch)
16	3613	2	10-24 x 1/2" Bolt
17	3733	1	Drain Cap w/Washer
18	3764	1	11/16" MPT x 1/2" HB
19	3603	1	3/8"MPT x 1/2" HB



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2 3 4 5

Ref No.	Part No.	Qty	Description
1	****	1	Tank Assembly
2	3636	6	#10 Lock Washer
3	3605	4	#10 Flat Washer
4	3604	4	10-24 x 1-1/4" Bolt
5	3613	2	10-24 x 1/2" Bolt

Assembly Instructions

Tools Needed For Cart Assembly

None

Remove from Carton

Remove all parts and hardware packages from the carton. Lay out all parts and hardware and identify them using the illustrations pages 2—3.

Assembly Tip: This unit comes fully assembled.

Parts and Support

Please do not return this product to the store prior to contacting Precision.

At Precision Products, Inc. our goal is to deliver quality, value and outstanding service. If for any reason our product does not meet your expectations, please contact us and we will take care of any problem you may have with this unit.

When ordering replacement parts please have the model number, part description, part number, inspector number and date on carton, available so that we can best serve you.

1 (800) 225-5891

www.precisionprodinc.com

Precision Products Inc.
316 Limit St.
Lincoln IL 62656

Sprayer Calibration

Proper calibration is one of the most important parts of spraying. Properly calibrated sprayers will save you both time and money.

How to determine the gallons per minute (per nozzle).

$$GPM = \frac{GPA \times MPH \times W}{5940}$$

GPM - Gallons Per Minute

GPA - Gallons Per Acre

MPH - Miles Per Hour

W - Nozzle spacing (in boom spraying)

This formula is useful to determine which tip to use on your boom, especially when your nozzle spacing is different from the standard 20" or 40" nozzle spacing on Precision Products, Inc. Sprayers. For example: You know you want to travel 3 MPH. You want to apply your chemical at a rate of 20 GPA, and your nozzle spacing's are 33" on center. By using the formula you will determine how many gallons per minute (GPM) per tip will be required to give you the correct application

20 GPA x 3 MPH = 60 x 33" (nozzle spacing) = 1980 now divide 1980 by 5940 = .333 GPM

You have now determined that you need a tip with GPM of .333. Now find the type of tip you want to use. For example, maybe an 80 degree flat fan spray tip and then determine what pressure you plan to spray at. Let's say 30 PSI. How do you check this calibration? By using this formula.

$$GPA = \frac{5940 \times GPM\ (Per\ Nozzle)}{MPH \times w}$$

Multiply 5940 x .333 GPM = 1783.8. Now multiply 3 MPH x 33 (nozzle spacing) = 99, then divide 1783.8 by 99 = 18.06 gallons per acre.

By simply adjusting your pressure or you tractor speed you will obtain the 20 GPA rate.

The second formula is useful to determine whether an old tip (one which you cannot identify the number) is still spraying the right amount of chemicals. You can determine how many GPM a tips is spraying, with the use of a catch jar and stop watch Hold the jar under the tip so you catch the total spray and time for one minute. The amount in the jar indicates the GPM.

Calibrate your sprayer carefully. If your tips are worn, replace them. New tips are a fraction of the cost of using either to much or to little chemicals. Also you can use these formulas to help determine if the pump intended to be used has the volume capacity to meet your spraying needs.

Operation

Operating power is obtained from a 12 volt Battery . Be sure to connect the red to the positive (+) source and attach the black to the negative(-) source.

IMPORTANT: Before spraying chemicals, fill the tank full of plain water to allow familiarization with the sprayer and to prevent the waste of expensive chemicals.

Maintenance Instructions

This Sprayer has been carefully designed and built and should provide many years of reliable service if properly cared for.

- Keeping the sprayer clean and dry will prolong the unit's life.
- Grease Wheels at regular intervals, at least once every six months, more frequently if used regularly.
- Should rust develop, sand lightly then paint area with enamel paint.
- Check tire pressure at regular intervals. Proper inflation will prolong the life of tires (see side of tire for inflation amount).

Cleaning and Storage

Most spray materials are highly corrosive. The most important aspect of long dependable service from your sprayer is a thorough cleaning immediately following each use. In addition, the residue of one type of chemical could cause an undesirable effect when a different chemical is used for a different purpose.

The most effective cleaning method is to pump several rinses of clean water through the tank, pump, hoses, boom, spray gun, etc. A neutralizing agent such as a solution of Nutra-Sol, a detergent or household ammonia as recommended by the chemical manufacturer can assist in removal of a persistent chemical. When the system is thoroughly cleaned, drain the tank, suction line, pump, hoses, etc.

1. Wash and flush out sprayer after completion of each phase of your program. Flush out sprayer when changing chemicals if there is a possibility of the chemicals being incompatible. Use of a detergent is advisable if the chemical manufacture does not make specific cleaning recommendations. Flush system completely, including nozzles. Never use metal objects to open clogged nozzles.
2. Clean sprayer thoroughly before storing at the end of the spraying season. Permanent type anti-freeze added to the final rinse will leave a rust inhibiting film on parts of the sprayer.

HOW TO ORDER REPLACEMENT PARTS:

When ordering parts always give model number, part number and part description.

Send To: Parts Division
316 Limit Street
Lincoln, IL 62656

Phone: 1-800-225-5891
1-217-735-1590 ext. 204

FAX: 1-217-735-2435